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| APPLICATION NO.                         | FILING DATE     | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.    | CONFIRMATION NO.        |  |
|---|-----------------|----------------------|------------------------|-------------------------|--|
| 09/779,498                              | 02/09/2001      | Hiroshi Yoshida      | 1095.1157/JDH          | 5527                    |  |
| 21171                                   | 7590 10/27/2005 |                      | EXAM                   | EXAMINER                |  |
| STAAS & HALSEY LLP                      |                 |                      | BORISSOV               | BORISSOV, IGOR N        |  |
| SUITE 700<br>1201 NEW YORK AVENUE, N.W. |                 | ART UNIT             | PAPER NUMBER           |                         |  |
| WASHINGTON, DC 20005                    |                 |                      | 3639                   |                         |  |
|   |                 |                      | DATE MAILED: 10/27/200 | DATE MAILED: 10/27/2005 |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

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|--|--|---|--|--|--|
| Office Action Summary  |  | Application No.   | Applicant(s)   |  |  |
|  |  | 09/779,498  | YOSHIDA, HIROSHI   |  |  |
|  |  | Examiner  | Art Unit   |  |  |
|  |  | Igor Borissov   | 3639   |  |  |
| Period fo  | The MAILING DATE of this communication app<br>or Reply   | ears on the cover sheet with the c  | orrespondence address  |  |  |
| WHIC - Exter after - If NC - Failu Any   | ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DANSIONS of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. period for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin vill apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE | N. nely filed the mailing date of this communication. D (35 U.S.C. § 133). |  |  |
| Status   | •  |   |  |  |  |
| 1)⊠  | Responsive to communication(s) filed on 09 Au  | ugust 2005.   |  |  |  |
| '=   | This action is <b>FINAL</b> . 2b) ☐ This action is non-final.  |   |  |  |  |
| 3)   | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is  |   |  |  |  |
|  | closed in accordance with the practice under E   | x parte Quayle, 1935 C.D. 11, 48  | o3 O.G. 213.   |  |  |
| Dispositi  | on of Claims   |   |  |  |  |
| 5)□<br>6)⊠<br>7)□  | Claim(s) 14-23 is/are pending in the application 4a) Of the above claim(s) is/are withdray Claim(s) is/are allowed. Claim(s) 14-23 is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and/or  | vn from consideration.  | *  |  |  |
| Applicati  | on Papers  |   |  |  |  |
| 10)  | The specification is objected to by the Examiner The drawing(s) filed on is/are: a) acce Applicant may not request that any objection to the o Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Ex-  | epted or b) objected to by the lidrawing(s) be held in abeyance. See ion is required if the drawing(s) is obj   | e 37 CFR 1.85(a).<br>jected to. See 37 CFR 1.121(d).                       |  |  |
| Priority u   | ınder 35 U.S.C. § 119  |   |  |  |  |
| <ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul> |  |   |  |  |  |
| 2) Notic<br>3) Inform  | e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date   | 4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:  |  |  |  |

#### **DETAILED ACTION**

#### Response to Amendment

Amendment received on 8/09/2005 is acknowledged and entered. Claims 1-13 have been canceled. New claims 14-23 have been added. Claims 14-23 are currently pending in the application.

## Claim Objections

Claims 14-23 are objected to because of the following informalities:

Claims use a repetitive language which is not necessary. For example, Claim 1 recites:

Registered noise countermeasure information storing means for storing noise countermeasure information;

Circuit information acquiring means for acquiring circuit information;

Noise countermeasure list information generating means for generating countermeasure list information.

Furthermore, the Claims are confusing, because it is not clear what part of the Claims is mere intended use and which parts constitute the novel features/components for performing the recited functionality. For example, Claim 1 recites:

Registered noise countermeasure information storing means for storing noise countermeasure information requested for registration by a registration terminal in the registration terminal connected via a network.

First, it is not clear how many *registration terminals* are employed. Second, it is not clear does the phrase "<u>for registration by a registration terminal in the registration terminal connected via a network</u>" indicate inventive structural elements or mere intended use of the system.

Appropriate correction is required.

## Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 14-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 14 recites the limitation "the generated noise countermeasure list information" in line 11. There is insufficient antecedent basis for this limitation in the Claim. Same reasoning applied to Claims 17, 19 and 22. The remaining Claims are rejected as being dependent on the rejected Claims.

#### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 14-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuchida et al. (US 5,559,997) in view of Robertson et al. (US 6,594,799).

Claim 14. Tsuchida et al. (Tsuchida) teaches a system for designing a printed circuit board, comprising:

Registered noise countermeasure information storing means for storing noise countermeasure information requested for registration by a registration terminal in the registration terminal connected via a network (the external storage unit 107, which is a magnetic disk or the like, stores/registers ... noise reduction component circuit pattern information) (C. 14, L. 65-C. 15, L. 1);

circuit information acquiring means for acquiring circuit information from a user terminal connected via the network, which uses the registered noise countermeasure information, the circuit information being included in items corresponding to a state of electronic circuits (the circuit information input unit 161 and the component information input means 162 for receiving circuit and component information including the name, shape, or electric characteristics of each component, thereby indicating "registering" feature) (C. 14, L. 45-52);

noise countermeasure information generating means for generating noise countermeasure information based on said registered noise countermeasure information and said circuit information, the generated noise countermeasure information including a plurality of noise countermeasure processes (components and processes of installing said components) (the external storage unit 107, which is a magnetic disk or the like, stores ... noise reduction component circuit pattern information) (C. 14, L. 65 - C. 15, L. 1); and transmitting the generated noise countermeasure information to said user terminal (the board design system reads out these different information when the system is started, and displays the designing conditions of the PC board (C. 15, L. 2-7, 15-17);

noise countermeasure information determining means for executing one of the noise countermeasure processes selected by the user from said noise countermeasure information, according to the items, which is required for the noise countermeasure, and transmitting noise countermeasure information which is determined as a result of the execution of the one of the plurality of noise countermeasure processes, to said user terminal (C. 15, L. 66 – C. 16, L. 4).

Tsuchida does not specifically teach that said generated noise countermeasure information including a plurality of noise countermeasure processes includes a *list* of a plurality of noise countermeasure processes.

Robertson et al. (Robertson) teaches a system for facilitating electronic circuit and chip design using remotely located resources, comprising:

means for storing electronic components and virtual circuit blocks information (C. 5, L. 1-10); means for profiling a user for assisting in determining a required tools and

services (C. 10, L. 51-52); and means for generating a *list* of available tools and services based on user's selection and presenting said list to the user at user terminal (C. 10, lines 19-23, 64-66).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Tsuchida to include that said presented plurality of noise countermeasure processes includes a *list* of a plurality of noise countermeasure processes, as disclosed in Robertson, because it would advantageously allow to present said available countermeasure processes in a ranked order by placing the most suitable choices for the user's design at the top of the listing, thereby simplifying the selecting process for the user (Robertson, C. 11, L. 1-7).

Claim 15. Robertson teaches said system further comprising charging control means for performing a charging control process to charge a user for selected items (C. 12, L. 35-36). The motivation to combine Tsuchida and Robertson would be to provide funds for the system to operate.

Claim 16. Robertson teaches said system wherein said means for charging for selected items comprises means for collecting data on usage of said selected items (C. 9, L. 16-21); said charging means further includes leasing means (C. 5, L. 17-19), thereby indicating charging for said selected items based on said collected data on usage of said selected items.

Claim 17. Tsuchida teaches said system for designing a printed circuit board, comprising:

computer apparatus comprising:

registered noise countermeasure information storing means for storing noise countermeasure information requested for registration by a registration terminal in the registration terminal connected via a network (the external storage unit 107, which is a magnetic disk or the like, stores/registers ... noise reduction component circuit pattern information) (C. 14, L. 65-C. 15, L. 1);

circuit information acquiring means for acquiring circuit information from a user terminal connected via the network, which uses the registered noise countermeasure information, the circuit information being included in items corresponding to a state of electronic circuits (the circuit information input unit 161 and the component information input means 162 for receiving circuit and component information including the name, shape, or electric characteristics of each component, thereby indicating "registering" feature) (C. 14, L. 45-52);

noise countermeasure information generating means for generating noise countermeasure information based on said registered noise countermeasure information and said circuit information, the generated noise countermeasure information including a plurality of noise countermeasure processes (components and processes of installing said components) (the external storage unit 107, which is a magnetic disk or the like, stores ... noise reduction component circuit pattern information) (C. 14, L. 65-C. 15, L. 1); and transmitting the generated noise countermeasure information to said user terminal (the board design system reads out these different information when the system is started, and displays the designing conditions of the PC board (C. 15, L. 2-7, 15-17);

noise countermeasure information determining means for executing one of the noise countermeasure processes selected by the user from said noise countermeasure information, according to the items, which is required for the noise countermeasure, and transmitting noise countermeasure information which is determined as a result of the execution of the one of the plurality of noise countermeasure processes, to said user terminal (C. 15, L. 66 - C. 16, L. 4).

Tsuchida does not specifically teach that:

said system is implemented in a client/server configuration;

said generated noise countermeasure information including a plurality of noise countermeasure processes includes a *list* of a plurality of noise countermeasure processes;

charging control means for performing a charging control process and identifier transmitting means for transmitting an identifier of the client apparatus.

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Robertson teaches a system for facilitating electronic circuit and chip design using remotely located resources, comprising:

a server and a client, said client is configured to access said server via the Internet (C. 5, L. 1-2; C. 7, L. 58-64; C. 8, L. 24-28);

means for generating a *list* of available tools and services based on user's selection and presenting said list to the user at user terminal (C. 10, lines 19-23, 64-66);

charging control means for performing a charging control process to charge a user for selected items (C. 12, L. 35-36); and

means for transmitting an *identifier* of the client apparatus (a user identification step 401 occurs when the user accesses the portal site 204. Such identification may be accomplished by recognition of a username/password combination, or a "cookie" left on the user system 220, or other means) (C. 15, L. 2-8).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Tsuchida to include that said system is implemented in a client/server configuration, as disclosed in Robertson, because it would advantageously allow to connect electronic designers and design teams and verification tool and service providers through a single portal site (Robertson, C. 5, L. 1-5).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Tsuchida to include that said presented plurality of noise countermeasure processes includes a *list* of a plurality of noise countermeasure processes, as disclosed in Robertson, because it would advantageously allow to present said available countermeasure processes in a ranked order by placing the most suitable choices for the user's design at the top of the listing, thereby simplifying the selecting process for the user (Robertson, C. 11, L. 1-7).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Tsuchida to include *charging control means* for performing a charging control process to charge a user for selected items, as disclosed in Robertson, because it would advantageously provide funds for the system to operate.

And it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Tsuchida to include means for transmitting an

identifier of the client apparatus for transmitting a username/password combination, as disclosed in Robertson, because it would advantageously enhance the security of the system and provide the confidentiality of the users' designs.

Claim 18. Robertson teaches said system wherein said means for charging for selected items comprises means for collecting data on usage of said selected items (C. 9, L. 16-21); said charging means further includes leasing means (C. 5, L. 17-19), thereby indicating charging for said selected items based on said collected data on usage of said selected items.

Claim 19. Tsuchida teaches said system for designing a printed circuit board, comprising:

a registered noise countermeasure information storing unit for storing noise countermeasure information requested for registration by a registration terminal in the registration terminal connected via a network (the external storage unit 107, which is a magnetic disk or the like, stores/registers ... noise reduction component circuit pattern information) (C. 14, L. 65-C. 15, L. 1);

a circuit information acquiring unit for acquiring circuit information from a user terminal connected via the network, which uses the registered noise countermeasure information, the circuit information being included in items corresponding to a state of electronic circuits (the circuit information input unit 161 and the component information input means 162 for receiving circuit and component information including the name, shape, or electric characteristics of each component, thereby indicating "registering" feature) (C. 14, L. 45-52);

a noise countermeasure information generating unit for generating noise countermeasure information based on said registered noise countermeasure information and said circuit information, the generated noise countermeasure information including a plurality of noise countermeasure processes (components and processes of installing said components) (the external storage unit 107, which is a magnetic disk or the like, stores ... noise reduction component circuit pattern

information) (C. 14, L. 65 - C. 15, L. 1); and transmitting the generated noise countermeasure information to said user terminal (the board design system reads out these different information when the system is started, and displays the designing conditions of the PC board (C. 15, L. 2-7, 15-17);

a noise countermeasure information determining unit for executing one of the noise countermeasure processes selected by the user from said noise countermeasure information, according to the items, which is required for the noise countermeasure, and transmitting noise countermeasure information which is determined as a result of the execution of the one of the plurality of noise countermeasure processes, to said user terminal (C. 15, L. 66 – C. 16, L. 4).

Tsuchida does not specifically teach that said generated noise countermeasure information including a plurality of noise countermeasure processes includes a *list* of a plurality of noise countermeasure processes.

Robertson et al. (Robertson) teaches a system for facilitating electronic circuit and chip design using remotely located resources, comprising:

a unit for storing electronic components and virtual circuit blocks information (C. 5, L. 1-10); unit for profiling a user for assisting in determining a required tools and services (C. 10, L. 51-52); and a unit for generating a *list* of available tools and services based on user's selection and presenting said list to the user at user terminal (C. 10, lines 19-23, 64-66).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Tsuchida to include that said presented plurality of noise countermeasure processes includes a *list* of a plurality of noise countermeasure processes, as disclosed in Robertson, because it would advantageously allow to present said available countermeasure processes in a ranked order by placing the most suitable choices for the user's design at the top of the listing, thereby simplifying the selecting process for the user (Robertson, C. 11, L. 1-7).

Claim 20. Robertson teaches said system further comprising a charging control

unit for performing a charging control process to charge a user for selected items (C. 12, L. 35-36). The motivation to combine Tsuchida and Robertson would be to provide funds for the system to operate.

Claim 21. Robertson teaches said system wherein said unit for charging for selected items comprises a unit for collecting data on usage of said selected items (C. 9, L. 16-21); said charging means further includes leasing means (C. 5, L. 17-19), thereby indicating charging for said selected items based on said collected data on usage of said selected items.

Claim 22. Tsuchida teaches said system for designing a printed circuit board, comprising:

computer apparatus comprising:

a registered noise countermeasure information storing unit for storing noise countermeasure information requested for registration by a registration terminal in the registration terminal connected via a network (the external storage unit 107, which is a magnetic disk or the like, stores/registers ... noise reduction component circuit pattern information) (C. 14, L. 65-C. 15, L. 1);

a circuit information acquiring unit for acquiring circuit information from a user terminal connected via the network, which uses the registered noise countermeasure information, the circuit information being included in items corresponding to a state of electronic circuits (the circuit information input unit 161 and the component information input means 162 for receiving circuit and component information including the name, shape, or electric characteristics of each component, thereby indicating "registering" feature) (C. 14, L. 45-52);

a noise countermeasure information generating unit for generating countermeasure information based on said registered noise countermeasure information and said circuit information, the generated noise countermeasure information including a plurality of noise countermeasure processes (components and processes of installing said components) (the external storage unit 107, which is a

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magnetic disk or the like, stores ... noise reduction component circuit pattern information) (C. 14, L. 65-C. 15, L. 1); and transmitting the generated noise countermeasure information to said user terminal (the board design system reads out these different information when the system is started, and displays the designing conditions of the PC board (C. 15, L. 2-7, 15-17);

a noise countermeasure information determining unit for executing one of the noise countermeasure processes selected by the user from said noise countermeasure information, according to the items, which is required for the noise countermeasure, and transmitting noise countermeasure information which is determined as a result of the execution of the one of the plurality of noise countermeasure processes, to said user terminal (C. 15, L. 66 - C. 16, L. 4).

Tsuchida does not specifically teach that:

said system is implemented in a client/server configuration;

said generated noise countermeasure information including a plurality of noise countermeasure processes includes a *list* of a plurality of noise countermeasure processes;

a charging control unit for performing a charging control process and an identifier transmitting unit for transmitting an identifier of the client apparatus.

Robertson teaches a system for facilitating electronic circuit and chip design using remotely located resources, comprising:

a server and a client, said client is configured to access said server via the Internet (C. 5, L. 1-2; C. 7, L. 58-64; C. 8, L. 24-28);

a unit for generating a *list* of available tools and services based on user's selection and presenting said list to the user at user terminal (C. 10, lines 19-23, 64-66);

a charging control unit for performing a charging control process to charge a user for selected items (C. 12, L. 35-36); and

a unit for transmitting an *identifier* of the client apparatus (a user identification step 401 occurs when the user accesses the portal site 204. Such identification may be accomplished by recognition of a username/password combination, or a "cookie" left on the user system 220, or other means) (C. 15, L. 2-8).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Tsuchida to include that said system is implemented in a client/server configuration, as disclosed in Robertson, because it would advantageously allow to connect electronic designers and design teams and verification tool and service providers through a single portal site (Robertson, C. 5, L. 1-5).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Tsuchida to include that said presented plurality of noise countermeasure processes includes a *list* of a plurality of noise countermeasure processes, as disclosed in Robertson, because it would advantageously allow to present said available countermeasure processes in a ranked order by placing the most suitable choices for the user's design at the top of the listing, thereby simplifying the selecting process for the user (Robertson, C. 11, L. 1-7).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Tsuchida to include a charging control unit for performing a charging control process to charge a user for selected items, as disclosed in Robertson, because it would advantageously provide funds for the system to operate.

And it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Tsuchida to include a unit for transmitting an identifier of the client apparatus for transmitting a username/password combination, as disclosed in Robertson, because it would advantageously enhance the security of the system and provide the confidentiality of the users' designs.

Claim 23. Robertson teaches said system wherein said means for charging for selected items comprises means for collecting data on usage of said selected items (C. 9, L. 16-21); said charging means further includes leasing means (C. 5, L. 17-19), thereby indicating charging for said selected items based on said collected data on usage of said selected items.

## Response to Arguments

Applicant's arguments filed 8/09/2005 have been fully considered but they are not persuasive.

In response to the applicant's argument that the prior art does not teach "noise countermeasure information" or "a plurality of noise countermeasure processes", it is noted that Tsuchida et al. does teach this feature. Specifically, Tsuchida teaches noise countermeasure information generating means for generating noise countermeasure information based on said registered noise countermeasure information and received from the user circuit design information, the generated noise countermeasure information including a plurality of noise countermeasure components and processes of installing said components (C. 14, L. 65 - C. 15, L. 1).

#### Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure (see form PTO-892).

Li et al. (US 6,212,490) teach a hybrid circuit model simulator for accurate timing and noise analysis.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Igor Borissov whose telephone number is 571-272-6801. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Hayes can be reached on 571-272-6708. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Igor Borissov

Patent Examiner

Art Unit 3639

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10/19/2005